

## \* Output Design:

- Starting point of designer process is proper knowledge of system requirement which normally be converted in terms of output.
- In any system, output is largely depending on Input.
- No system can be design properly without knowing what output is exactly required. It means that organization's output need should be consider first.
- \* Before devising appropriate method & procedure, database, plan, Input & effective Internal control.

- While designing output, System Analyst must accomplish following
  - 1) determine what information is to be present?
  - 2) Decide whether to display to print or speak information and select output medium.
  - 3) Arrange presentation of Information in acceptable format.
  - 4) Decide how to distribute output to intended recipient

## \* Objective of Output Design:

- The output from Information System should accomplish one or more following objectives:
  - 1) Convey the information about past activity, current status & future projections.
  - 2) Signal important events, opportunity or exception.
  - 3) Trigger of Alarm
  - 4) Conform the actions

## \* Types of Output

- Main types of output is as follow :-
  - 1) External output
  - 2) Internal Output
  - 3) Ternaround output
  - 4) Operational output
  - 5) Interactive output

### 1) External Output :

- It intended to go outside user organizations
- e.g. Payslip, <sup>tax</sup> return

### 2) Internal Output :

- It is used within user organization and it requires careful design, because they are user interface with computer.
- e.g. pay structure, Attendance, etc.

### 3) Ternaround output :

- The data will be added to this document before they are ~~return~~ written to the computer for further processing.
- e.g. credit card billing.

#### 4) Operational Output:

- The use of operational output is within computer department.
- e.g. Timetable, program listing

#### 5) Interactive output:

- It involve user communicating directly with computer.
- e.g. dialogbox.

#### \* Output Media:

- The System analyst has to determine most appropriate medium for output.
- The most common medium are as follow.
  - 1) Printed output
  - 2) Visual output
  - 3) Turnaround document output
  - 4) Secondary storage output
  - 5) Microfilm & Microfiche output.
  - 6) Audio response output.

## 1) Printed Output:

- line printer, dotmatrix printer, laser printer, plotter are commonly used device for printed output.

## 2) Visual Output:

- CRT unit is widely use in the form of visual output.
- With CRT unit, Hardcopy is not required.
- eg. order entry system, Account Payable or receivable system, Airline & train Reservation System. [visual output is more suitable]

## 3) Turnaround Document Output:

- In order to reduce input work at lower **RATE** turnaround document in a form of punch card are widely use.
- eg. credit card billing & employee time card.
- Additionally OCR form can be prepaid as a output which serve as input to the computer system at later date.

#### 4) Secondary Storage Output:

- It generally include magnetic disk, magnetic drum and magnetic tape.

#### 5) Microfiche output:

- Microfiche are photographically reduce document on **FILM**
- The output is **WRITTEN** on microfilm which is **FED INTO** micro form recorder.
- This technique is widely use in library.

#### 6) Audio response output:

- It is capable of providing online inquiry into system. when output is restricted to short messages.
- e.g. banking system provide balance of customer.

## \* Design Principle of Output:

- A system design should try to incorporate following design principle for output.

- 1) Principle of starting with output.
- 2) Principle of acceptability of report.
- 3) Principle of timely output.
- 4) Principle of enhancing decision making process.
- 5) Principle of practising "management by exceptions".
- 6) Principle of duplication reduction in report.
- 7) Principle of simplicity of report.

### 1) Principle of starting with output:

- No system can be design properly without knowing what output is exactly required.
- It means that organization output need should be consider first before design devising appropriate method, good procedure, database, plan & effective internal control.

### 2) Principle of acceptability of Report:

- End user has to accept this output since they are people who will be using it for their desired output.

### 3) Principle of timely output:

- An ~~out~~ output in time can help to make better decision.

### 4) Principle of enhancing decision Making Process:

- After all system are design for manager and director to make better decision.
- Naturally output report must be prepared. Keeping this principle constantly in mind.

### 5) Principle of practising "Management by Exception":

- Management control through completed task, the report should be design not only for what has happen but also for what deviation where there from there actual plan.

### 6) Principle of duplication reduction in report:

- Duplicate or unnecessary information report should be minimize to extend possible.
- It automatically reduce processing cost.

### 7) Principle of Simplicity of Report:

- Report should be consider as simple and self explain explanatory.